

LBNE “Weekly” Status Report
27 October 2010
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CD-1 Document Preparation

CDR (DocDB 2339)

- Volume 1 - *Overview and Science*: This volume continues to be edited. The attempt is to present a set of Science goals, but needing to keep an eye on what the actual configuration of the project will end up being. It may need iteration as the project scope evolves with the understanding of the cost estimates.
- Volume 2 - *Neutrino Beamline*: Complete draft posted on 16 September for the Project Manager’s review of the beamline (20-22 September). Work is proceeding to integrate comments and recommendations from the review, as well as other changes. Value engineering work has begun. An updated version will be posted in mid-November.
- Volume 3 - *Near Detector*: Complete draft posted 29 September for the Project Manager’s review of the near detector (4-5 October). Work continues on incorporating the input from the review. Content with regards to the Configuration Recommendation Plan and the LAr Safety plan was developed.
- Volume 4 - *Water Cherenkov Detector*: Complete draft posted on 17 September for the Project Manager’s review of the water Cherenkov Detector (27-29 September). Work has begun on incorporating the input from the review. The main effort is currently concentrated on value engineering, contingency analysis, and risk analysis.
- Volume 5 - *Liquid Argon TPC*: A complete draft, which has been internally reviewed by the LAr Working Group, was posted on 22 October, in preparation for the Project Manager’s review of the LAr TPC, scheduled for 1-3 November.
- Volume 6 - *Conventional Facilities at Fermilab*: Last complete draft dated 28 July. The next draft will be posted on 27 October, in advance of the Project Manager’s review of Conventional Facilities (3-5 November).
- Volume 7 - This is being assembled from: parts of the DUSEL PDR, which is under intense development, reports from Jacobs regarding underground facilities, report from Arup regarding rock waste handling, due October 31, and a report from HDR regarding the surface facilities, due October 31. In this development we are helped greatly by to good cooperation by DUSEL. A CDR draft will be posted on 27 October in advance of the Project Manager’s review of Conventional Facilities (3-5 November).

Alternative Analysis The current draft was sent to Mike Procario on 18 October. It summarizes the alternatives for proton source, baseline, far site and far detector configurations and shows the far detector capability for 2+0, 1+1, and 0+2, Water Cherenkov and Liquid Argon Modules. Discussions continue with DOE as to how best to incorporate discussion of siting options.

Acquisition Plan Draft Acquisition Plans have been developed for the Beamline and WCD, and are being reviewed by those subprojects. Plans are in progress for the remaining subprojects, and are expected to be complete by mid-November.

Key Assumptions Documents The draft Key Assumptions document (DocDB 2192) has been split into six documents, one covering the project as a whole, and five for each of the Level 2 technical subprojects. Early, unreviewed drafts are posted for all but the beam, which will be posted this week. There has been no further progress on the draft “Key Assumptions: Physics Research Goals of the LBNE Project” since the last report.

Preliminary Project Management Plan Information is slowly being added, and is awaiting review by the Project Manager. Subproject specific information has been solicited from all Subproject Managers to include in associated areas of the PMP..

DUSEL-LBNE MOU Writing assignments for many sections were made in a meeting on 2 September between DUSEL and LBNE Project Offices. A preferred mode of funding flow from DOE to DUSEL to support LBNE conventional facilities work has been discussed among DUSEL and LBNE management, the DOE site office, and the JOG Working Group. This requires further study. The next “face-to-face” meeting between DUSEL and LBNE to push towards completing the MOU will occur this Thursday via videoconference.

Risk Management Plan A reasonably complete draft exists, but it needs to be updated to incorporate the idea of an external Risk Review Panel, to supplement the internal Risk Management Board. A first meeting of the Risk Management Board was held on 15 October at which contingency rules and information needed for the completion of current risk assessments were discussed. The Board determined that a single set of contingency rules needs to be implemented for successful CD-1 review, and the simpler of the two candidate algorithms was chosen.

Risk Assessment The Risk Manager is continuing to risk assessments from Sub-Projects and working with them to document accurate assessments. Formal Primavera Risk Management software training was conducted on site at Fermilab last week. Preliminary risk registers for both Liquid Argon and Conventional Facilities have been posted to the DocDB in advance of the upcoming Project Manager’s reviews. The Risk Registry for the Near Detector was updated, but there has not been a change in the highest risks. Preliminary analysis is being conducted linking risks to schedule.

QA Plan Advanced draft presented to Director’s Review in July. Little progress since then. It is awaiting input from the Project Manager.

Preliminary Hazard Assessment Continuing to gather data from each of the subprojects for development of the Preliminary Hazard Assessment. Developing the Draft Preliminary Fire Protection & Life Safety Assessment document. Incorporating ES&H requirements into the Conventional Facilities Requirements document. Continuing to review cryogenic safety issues and evaluate requirements for the Near Detector Hall.

NEPA Strategy A date is being sought that agreeable to all of the key participants for a Scoping Meeting for the LBNE EA. The current best guess is that this will take place in mid-December.

Preliminary Resource Loaded Schedule Each subproject has been developing its own RLS in its own format, and we are now working towards a common scheme. The format and content of a standard BOE form is being reviewed. Individual sub-project RLS are being reviewed as part of the series of Project Manager's Level 2 reviews. Value engineering work has begun on all subprojects with the aim of bringing the current, preliminary cost estimates into a range consistent with the CD-0 cost range.

Staffing

Project Controls The project controls team is fully staffed, with one person assigned to each subproject, and an overall lead, for a total of six. Four of these, including the Lead, are contractors. Two candidates for a staff position Project Controls Lead are scheduled for the week of 25 October.

Beam Level 2 Project Engineer Our candidate, Michael Campbell, has accepted our offer and is scheduled to start on November 1.

CF Far Site Level 3 Manager Advertisement to fill this position were posted on 12 October, and we are awaiting resumes. Currently David Taylor of DUSEL is serving in an acting role. However, DUSEL may need to divert a substantial fraction of his time to other work. Fermilab/FESS has agreed provide whatever help is necessary to keep this piece of the project on track. However, this solution will inevitably result in a loss of efficiency.

Reviews

A Project Manager's Conceptual Design, Cost and Schedule Review of the Neutrino Beamline was held on 20-22 September at Fermilab. The review web page is http://lbne.fnal.gov/reviews/beam_review.shtml. The final review report is posted at <http://lbne2-docdb.fnal.gov:8080/cgi-bin/ShowDocument?docid=2769>.

A Project Manager's Conceptual Design, Cost and Schedule Review of the Water Cherenkov Detector was held on 27-29 October at BNL. The review web page is http://lbne.fnal.gov/reviews/WCD_review.shtml. The final review report is posted at <http://lbne2-docdb.fnal.gov:8080/cgi-bin/ShowDocument?docid=2799>.

A Project Manager's Conceptual Design, Cost and Schedule Review of the Near Detector was held on 4-5 October at LANL. The review web page is http://lbne.fnal.gov/reviews/ND_review.shtml. The review report is posted at <http://lbne2-docdb.fnal.gov:8080/cgi-bin/ShowDocument?docid=2822>

A Project Manager's Conceptual Design, Cost and Schedule Review of the Liquid Argon TPC is scheduled for 1-3 November at Fermilab, and the full review committee is in place. The review web page is http://lbne.fnal.gov/reviews/LAr_review.shtml.

A Project Manager's Conceptual Design, Cost and Schedule Review of LBNE Conventional Facilities is scheduled for 3-5 November at Fermilab, and the review committee of five members is in place. The review web page is http://lbne.fnal.gov/reviews/CF_review.shtml.

A simple Excel file has been created to allow us to track the status of recommendations from Project Manager's, Director's, and eventually DOE reviews. It is posted as DocDB 2863.

Other Events

A Project Management Team "retreat" is being planned for the beginning of the week of 15 November.

A briefing for DOE/OHEP by the LBNE Project is scheduled for 30 November in Germantown.

A list of recent and future LBNE-related reviews, meetings and other important events is posted at <http://lbne.fnal.gov/calendar-events.shtml>.